

IN THE DRAWINGS

The attached drawing sheets include changes to Figures 1 and 3C. These sheets, which include Figures 1 and 3C, replace the original sheets including Figures 1 and 3C.

Attachment: 2 Replacement Sheets

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in view of the present amendment and in light of the following discussion, is respectfully requested.

Claims 56-70 are pending. In the present amendment, Claims 56, 64, 66, 69, and 70 are currently amended. Support for the present amendment can be found in the originally filed specification, for example, at page 7, line 16 to page 8, line 3. Thus, it is respectfully submitted that no new matter is added.

In the outstanding Office Action, the drawings were objected to; Claims 56, 64, and 66 were rejected under 35 U.S.C. § 112, first paragraph; Claims 56, 62, 69, and 70 were rejected under 35 U.S.C. § 103(a) as unpatentable over Stall et al. (U.S. Patent 5,544,618, hereinafter “Stall”) in view of Ahn (U.S. Patent 6,726,801) and Makino et al. (U.S. Patent 5,391,260, hereinafter “Makino”); Claims 57-59 were rejected under 35 U.S.C. § 103(a) as unpatentable over Stall in view of Ahn and Makino, and further in view of Dandl et al. (U.S. Publication No. 2001/0016166, hereinafter “Dandl”) and van Os et al. (U.S. Patent 6,178,918, hereinafter “van Os”); Claims 60 and 61 were rejected under 35 U.S.C. § 103(a) as unpatentable over Stall in view of Ahn, Makino, Dandl, and van Os, and further in view of Ishii (U.S. Patent 5,685,942); Claims 63-66 and 68 were rejected under 35 U.S.C. § 103(a) as unpatentable over Stall in view of Ahn, Makino, Dandl, and van Os, and further in view of Ohmi et al. (U.S. Patent 6,357,385, hereinafter “Ohmi”); Claim 67 was rejected under 35 U.S.C. § 103(a) as unpatentable over Stall in view of Ahn and Makino, and further in view of Carducci et al. (U.S. Publication No. 2003/0038111, hereinafter “Carducci”); Claims 56, 62, 68, and 69 were rejected under 35 U.S.C. § 103(a) as unpatentable over Komino (U.S. Patent 6,634,845) in view of Stall and Makino; Claims 57-59 were rejected under 35 U.S.C. § 103(a) as unpatentable over Komino in view of Stall and Makino, and further in view of Dandl and van Os; Claims 60 and 61 were rejected under 35 U.S.C. § 103(a) as unpatentable

over Komino in view of Stall and Makino, Dandl, and van Os, and further in view of Ishii; Claims 63-66 were rejected under 35 U.S.C. § 103(a) as unpatentable over Komino in view of Stall and Makino, Dandl, and van Os, and further in view of Ohmi; Claim 67 was rejected under 35 U.S.C. § 103(a) as unpatentable over Komino in view of Stall and Makino, and further in view of Carducci; and Claim 70 was rejected under 35 U.S.C. § 103(a) as unpatentable over Komino in view of Stall and Makino.

Regarding the objection to the drawings, Figure 1 is hereby amended to show both the pump (51) and the valve (52) included in the pumping cell (60). It is respectfully submitted that no new matter is added. Thus, it is respectfully requested that the objection to the drawings be withdrawn.

Figure 3C is also hereby amended to show the lid 70 recited in the claims.

Regarding the rejection of Claims 56, 64, and 66 under 35 U.S.C. § 112, first paragraph, these claims are hereby amended to remove the word “integrally” and to replace the word “seal” with “lid,” as suggested on page 4 of the Office Action. The word “seal” is also hereby replaced with “lid” in Claims 69 and 70. It is respectfully submitted that no new matter is added. Thus, it is respectfully requested that the rejection under 35 U.S.C. § 112, first paragraph be withdrawn.

In response to the rejections under 35 U.S.C. § 103(a), Applicant respectfully requests reconsideration of these rejections and traverses these rejections, as discussed below.

It is respectfully submitted that none of the references cited in rejecting independent Claim 56 (Stall, Ahn, Makino, and Komino) disclose or suggest *repositioning* pumping cells and seals to *reconfigure* the gas flow in the processing apparatus.

Claim 56 recites, in part, “removing the pumping cell from the first pumping port and providing a substitute lid to the first pumping port such that the substitute lid blocks a gas flow through the first pumping port; and removing the lid from the second pumping port and

providing a substitute pumping cell to the second pumping port such that a gas flow through the vacuum processing apparatus is reconfigured by the providing the substitute lid to the first pumping port and the providing the substitute pumping cell to the second pumping port.”

Applicant notes that the substitute lid provided to the first pumping port may be the same lid that is removed from the second pumping port, or a different lid. Additionally, the substitute pumping cell provided to the second pumping port may be the same pumping cell removed from the first pumping port or a different pumping port. Thus, the method of making an improved vacuum processing apparatus recited in Claim 56 is aimed at pumping cells and lids that can be reconfigured within the various pumping ports such that the gas flow is also reconfigured.

The Office Action, on page 6, concedes that the combination of Stall and Ahn does not disclose or suggest “removing the pumping cell from the first pumping port and providing a substitute seal to the first pumping port such that the substitute seal blocks a gas flow through the first pumping port; and removing the seal from the second pumping port and providing a substitute pumping cell to the second pumping port.” Instead, the Office Action takes the position that this removing and providing would have been obvious to a person of ordinary skill in the art and the motivation for such removing and providing would be “to rearrange the pumping cell and the seal (flange) for optimizing the exhaust gas flow in the apparatus of Stall and Ahn.”

However, Applicant notes that Stall only describes a single exhaust connection 178 and does not disclose or suggest removing or reconfiguring the exhaust. Additionally, Stall does not disclose or suggest removing a pumping cell or sealing off an area from which the pump was removed.

Ahn is cited by the Office Action on page 5 as describing a pump 120 and a gate valve 124 or a vacuum control valve 122. However, Ahn also does not disclose or suggest

removing the pump 120 and valve (122 or 124) or sealing off an area from which the pump was removed.

Accordingly, although the Office Action takes the position that it would have been obvious to a person of ordinary skill in the art remove and replace the pump 120 and valve (122 or 124) and the flange described in Stall and Ahn, the Office Action has not cited *any evidence* that teaches or suggests the removing and replacing. As discussed above, the references themselves do not disclose or suggest that the parts can be removed or replaced. Instead, the Office Action has only cited individual parts of an apparatus without providing evidence that these parts can be removed and utilized to replace one another, as required by method Claim 56.

Further, the Office Action cites In re Japikse for the proposition that “mere rearrangement of parts which does not modify the operation of a device is *prima facie* obvious.” However, Applicant respectfully submits that the claim at issue in In re Japikse was an apparatus claim, and not a method claim in which the act of rearranging the parts was a claimed feature. Further, it is noted that the rearranging the parts according to the claimed method will clearly modify the operation of the vacuum processing apparatus. If fact, the Office Action recognizes this in the third paragraph on page 6 immediately before citing In re Japikse by stating that the motivation for rearranging was “for optimizing the exhaust gas flow in the apparatus.”

Next, the Office Action, on page 7, concedes that the combination of Stall and Ahn does not disclose or suggest “that the gas flow is reconfigures by the providing the substitute seal to the first pumping port and the providing the substitute pumping cell to the second pumping port.” Instead, the Office Action relies on Makino to cure these deficiencies of Stall and Ahn.

Specifically, the Office Action again relies on the modified embodiment described at lines 1-6, on column 6 of Makino. Makino describes a modification of an embodiment of a vacuum apparatus in which a pair of exhaust pumps 42 are provided on lower side walls of the apparatus.²

However, it is respectfully submitted that the combination of Stall in view of Ahn and Makino does not disclose or suggest “removing the pumping cell from the first pumping port and providing a substitute lid to the first pumping port such that the substitute lid blocks a gas flow through the first pumping port; and removing the lid from the second pumping port and providing a substitute pumping cell to the second pumping port such that a gas flow through the vacuum processing apparatus is reconfigured by the providing the substitute lid to the first pumping port and the providing the substitute pumping cell to the second pumping port,” as recited in Claim 56.

Instead, it is respectfully submitted that the modification described in Makino is not the claimed *reconfiguration* of a vacuum processing apparatus accomplished by removing pumping cells and lids from pumping ports and providing them in different pumping ports. On the contrary, the pair of exhaust pumps 42 described in Makino were not added to a pumping port that previously was sealed. Further, none of these references (Stall, Ahn, and Makino) disclose or suggest that the method steps which produce the reconfigured apparatus such that a lid is provided in place of one of the pair of exhaust pumps 42. Thus, the cited combination of Stall in view of Ahn and Makino does not describe a method of *reconfiguring* an apparatus, but instead these references describe a number of different individual apparatuses that each have a different configuration.

Therefore, it is respectfully submitted that the combination of Stall, Ahn, and Makino does not disclose or suggest every feature recited in Claim 56. Specifically, even assuming

² See Makino, at col. 5, line 66 to col. 6, line 6 and in Figure 7.

the cited combination is proper, the combination does not disclose or suggest the claimed method including the reconfiguring pumping cells within a vacuum processing apparatus by using lids to effectively block a pumping port when the pumping cell is removed therefrom and adding the removed pumping cell to a different pumping port. Thus, it is respectfully requested that the rejection of Claim 56, and all claims dependent thereon, as unpatentable over Stall in view of Ahn and Makino, be withdrawn.

The Office Action also rejected independent Claim 56 as being unpatentable over Komino in view of Stall and Makino. The above discussions of Stall and Makino also apply with respect to this rejection.

Similar to the combination of Stall and Ahn, the Office Action on pages 15 and 16 concedes that Komino and Stall does not disclose or suggest “removing the pumping cell from the first pumping port and providing a substitute seal to the first pumping port such that the substitute seal blocks a gas flow through the first pumping port; and removing the seal from the second pumping port and providing a substitute pumping cell to the second pumping port,” but again takes the position that this removing and providing would have been obvious to a person of ordinary skill in the art for the reasons stated above.

Although Komino does describe that a valve 89 can be closed such that a failed pump 88 can be removed from a process module 80, as conceded by the Office Action, Komino does not disclose or suggest replacing the removed pump 88 at a pumping port that is different from the port which the removed pump 88 was removed from. Further, Komino does not disclose or suggest removing the valves 89 from the module 80 and utilizing them at a different pumping port.

Accordingly, it is respectfully submitted that the claimed removing and providing is not disclosed or suggested in Komino and Stall and would not have been obvious to one of ordinary skill in the art based upon the cited references.

Therefore, it is also respectfully submitted that the combination of Komino, Stall, and Makino does not disclose or suggest every feature recited in Claim 56. Thus, it is respectfully requested that the rejection of Claim 56, and all claims dependent thereon, as unpatentable over Komino in view of Stall and Makino, be withdrawn.

Additionally, regarding the remaining secondary references (Dandl, van Os, Ichii, Ohmi, and Carducci), it is respectfully submitted that none of these secondary references cure the above-noted deficiencies of Stall in view of Ahn and Makino or Komino in view of Stall and Makino. Thus, it is respectfully requested that the rejections of Claim 56, and all claims dependent thereon, be withdrawn.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. A Notice of Allowance is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

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